

# DETAIL SPECIFICATION SHEET

## SOCKETS (LEAD, ELECTRONIC COMPONENTS) (TYPE VI, SOLDERLESS SPRING CONTACT)

This specification is approved for use by all  
 Departments and Agencies of the department of Defense.

The requirements for acquiring the product described herein shall  
 consist of this specification and MIL-DTL-83505.

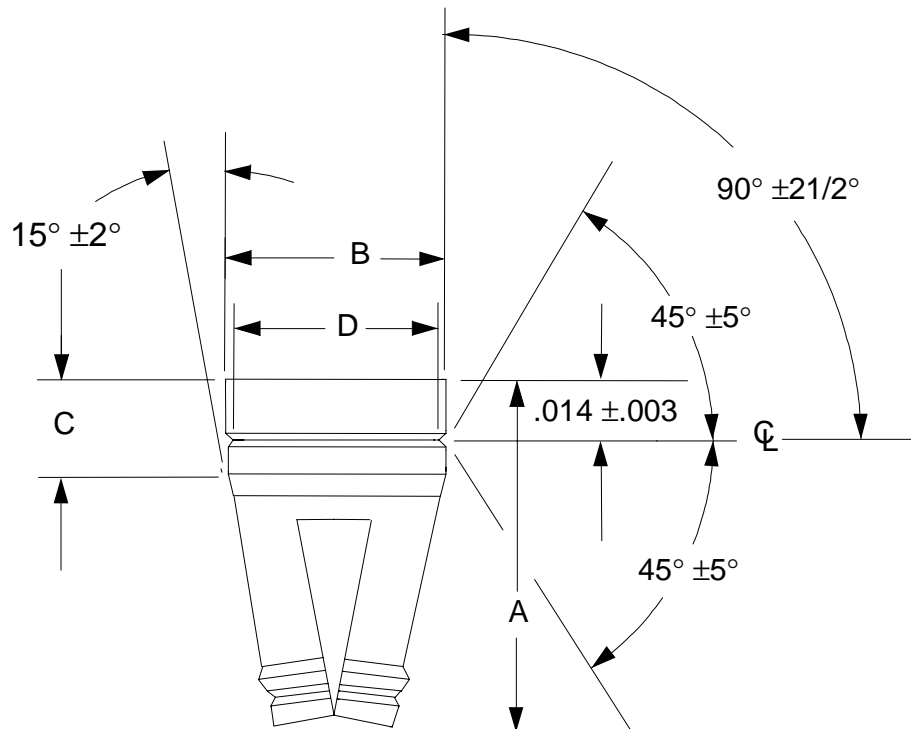


FIGURE 1. Socket, lead, (type VI solderless spring contact).

MIL-DTL-83503/6E  
Dash numbers and dimensions.

Dash number	Accepts pin		A ±.003 (0.076) (mm)	B ±.0005 (0.013) (mm)	C ±.003 (0.076) (mm)	D ±.003 (0.076) (mm)
	Length min (mm)	Dia (mm)				
-001	.100 (2.54)	.021 (0.53) max .016 (0.41) min	.094 (2.39)	.044 (1.12)	.020 (0.51)	.040 (1.02)
-002	.140 (3.56)	.030 (0.76) max .021 (0.53) min	.136 (3.45)	.0625 (1.59)	.025 (0.64)	.054 (1.37)
-003 1/	.140 (3.56)	.035 (0.89) max .030 (0.76) min 2/	.136 (3.45)	.0625 (1.59)	.025 (0.64)	.054 (1.37)
-004	.160 (4.06)	.044 (1.12) max .038 (0.97) min 3/	.156 (3.96)	.086 (2.18)	.024 (0.61)	.077 (1.96)

1/ Also accepts .025 inch (0.64 mm) square post.

2/ Use gage pin with a diameter of .0300 inch (0.76mm) +.0002 / -.0000 inch (0.0051/ - 0.0000 mm) minimum and .0350 inch (0.889 mm) +.0000, -.0002 inch (+0.000/ -0.0051 mm) maximum.

3/ Use gage pin with a diameter of .0380 inch (0.965 mm) +.0002/ -.0000inch (0.0051/ -0.0000 mm) minimum and .0440 inch (1.118 mm) +.0000/ -.0002 inch (+0.000/ -0.0051 mm) maximum.

Dash number	Recommended mounting hole dia 1/ ± .002 (0.051 mm)	Test length minimum (mm)	Test gauge mating force max lbs (kg)	Plated through hole 1/ Upper limit area ref. (mm)
-001	.041 (1.04)	.100 (2.54)	2.0 (0.91)	.042 (1.041) to .043 (1.092)
-002	.057 (1.45)	.140 (3.56)	3.5 (1.59)	.057 (1.45) to .059 (1.50)
-003	.057 (1.45)	.140 (3.56)	3.5 (1.59)	.057 (1.45) to .059 inch (1.50)
-004	.081 (2.06)	.160 (4.06)	4.5 (2.04)	.081 (2.06) to .083 (2.11)

1/ Plated through hole in accordance with IPC-2221, dimensions are for test purposes.

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Metric equivalents are in parentheses.
4. Unless otherwise specified, tolerance is ± .005 inch (0.13 mm).

FIGURE 1. Socket, lead, (type VI solderless spring contact) - Continued.

REQUIREMENTS:

Dimensions and configurations: See figure 1.

Terminals: Type VI (solderless spring contact).

Mounting: Use .046 inch (1.17 mm) minimum thickness mounting board containing plated through holes.

Test mounting: Foil clad laminate printed wiring board.

Spring contact printed wiring board (pwb) retention: A 4-pound (1.81 kg) axial load shall be used. The test shall be performed with the socket mounted in a test board. Any separation or loosening of the contact from the test board shall be an indication of noncompliance.

Terminal strength: Not applicable.

Unmating force (for -004): 1 ounce minimum.

Group qualification: All dash numbers require all qualification tests of MIL-DTL-83505.

Part or Identifying Number (PIN): M83505/6 - (dash number from figure 1).

Asterisks are not used in this revision to identify change with respect to the previous issue due to the extensiveness of the changes.

CONCLUDING MATERIAL

Custodians:

Army - CR  
Navy - EC  
Air Force - 11  
DLA - CC

Preparing activity:  
DLA - CC

(Project 5935-4328)

Review activity:

Air Force - 99